REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks.

Claims 1-13, 15-23, 25-29, 31-38 and 40 are pending in the application, with claims 1 and 40 being independent. Claims 14, 24, 30, 39, and 41-74 were previously canceled. Claims 1 and 40 are amended herein. Support for the claim amendments and additions can be found in the original disclosure. No new matter has been added.

§ 102 REJECTIONS

Claims 1-3, 5-12, 15, 18, 21-23, 25, 27-29, 31-38, and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,157,927 ('Schaefer"). Applicant respectfully traverses the rejection, and requests that the rejection be reconsidered and withdrawn.

Independent claim 1, as presently presented, is directed to Interfaces, stored on one or more computer-readable media, to be called on kernel transaction management objects, and recites:

> Interfaces, stored on one or more computer-readable media, to be called on kernel transaction management objects, comprising:
>
> application program interfaces (APIs) local with the transaction manager located in a kernel to implement operations in the kernel on a kernel transaction object (TX), the TX representing a transaction, the TX being accessible by at least one process participating in the transaction;
>
> APIs local with the transaction manager to implement kernel-level operations on a kernel resource management object (RMO), the RMO representing a relationship between a TX associated with the

transaction manager and at least one resource that participates in the transaction, the resource capable of storing data in a durable state; and

APIs local with the transaction manager to implement kernel-level operations on a kernel enlistment (EN) object, the EN representing a relationship between a resource manager and the transaction.

Schaefer is directed to "[a]n interconnect for enabling a component in a transaction processing environment to request, as part of a global transaction under the control of a transaction manager that is not XATMI-compliant, a resource on a remote server outside of that environment that is under the control of an XATMI-compliant transaction manager." (Abstract). The interconnect of Schaefer includes a connection manager and a resource manager. (Summary). Specifically, the connection manager described by Schaefer "comprises a protocol machine that communicates with a requested resource on the remote server in accordance with a bi-directional, two-phase commitment communications protocol"; and the resource manager "has a first interface that receives XATMI service requests from the component and a second interface that receives directives (e.g., prepare, commit, abort, etc.) issued by the first transaction manger for a given global transaction." (Summary).

Applicant respectfully submits that Schaefer fails to disclose or suggest the recitations of claim 1 for at least the following two reasons. First, Schaefer fails to disclose or suggest "application program interfaces (APIs) local with the transaction manager located in a kernel to implement *operations in the kernel*" as recited in claim 1. (Emphasis added).

The Office acknowledges that, with reference to the rejection of claim 1: "Schaefer teaches interfaces, stored on one or more computer-readable media, to be called on kernel transaction management objects, comprising: application program interfaces (APIs) to implement operations on a kernel transaction object (TX) (figure 4D '...ITransaction interface...' Col. 15 Ln. 15-33)." (Office Action, page 2). Applicant provides the relevant sections of Shaefer that was cited by the Office. Specifically, column 15, lines 15-33 recites:

> When an instantiated MTS component is configured as requiring or supporting a transaction, *MTS also creates a Transaction object 78 (FIG. 4D) that represents the transaction for which that MTS component is attempting to perform work.* More than one MTS component can perform work for a given transaction. The GetTransaction method of the IObjectContextTransaction interface of the context object of a given MTS component can be invoked to obtain a reference (i.e., pointer) to the Transaction object representing the transaction for which the component is performing work. If multiple MTS components perform work for the same transaction, the GetTransaction method of each will point to the same Transaction object. Once a pointer to the Transaction object 78 is obtained, a GetTransactionInfo method of the ITransaction interface of the Transaction object 78 can be invoked to obtain information about the transaction. For example, this information contains a globally unique identifier (GUID) that MTS assigns to the transaction to identify it within the MTS environment. (Emphasis added).

Applicant submits that the cited portion of Shaefer fails to disclose "transaction manager located in a kernel to implement operations in the kernel" as recited in claim 1. Rather, the operations of Shaefer do not take place in the kernel. Specifically, a thorough search of Shaefer fails to uncover any mention of the term Kernel or any related variation of Kernel as applied to the recitations of Applicant's claim 1. Therefore, Schaefer fails to disclose or suggest "application program interfaces (APIs) local with the transaction

manager located in a kernel to *implement operations in the kernel*" as recited in claim 1. (Emphasis added).

Second, Schaefer fails to disclose or suggest "application program interfaces (APIs) *local with the transaction manager located in a kernel* to implement operations in the kernel" as recited in claim 1. (Emphasis added). The Office acknowledges that, with reference to the rejection of claim 1: "Schaefer teaches interfaces, stored on one or more computer-readable media, to be called on kernel transaction management objects, comprising: application program interfaces (APIs) . . . (figure 4D '...ITransaction interface...' Col. 15 Ln. 15-33)." (Office Action, page 2). However, the APIs of Schaefer reside on a remote server rather than "local with the transaction manager located in a kernel" as recited in claim 1. Specifically, Schaefer provides: "An interconnect for enabling a component in a transaction processing environment to request, as part of a global transaction under the control of a transaction manager that is not XATMI-compliant, a resource *on a remote server outside of that environment* that is under the control of an XATMI-compliant transaction manager, comprises a resource manager and a connection manager." (Abstract, Emphasis added). Since the transaction manager of Schaefer resides on a remote server, Schaefer fails to disclose or suggest "application program interfaces (APIs) *local with the transaction manager located in a kernel* to implement operations in the kernel" as recited in claim 1. (Emphasis added).

Accordingly, Applicant respectfully submits that claim 1 is distinguishable over Schaefer for at least the foregoing reasons.

Dependent claims 2-3, 5-12, 15, 18, 21-23, 25, 27-29, 31-38, and 40 depend from independent claim 1 and are also distinguishable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Independent claim 40, as presently presented, is directed to "An apparatus for implementing a transaction", and recites:

> An apparatus for implementing a transaction, comprising:
> a kernel transaction object (TX) to represent a transaction, the TX accessible by at least one process participating in the transaction;
> a kernel resource manager object (RMO) to represent a relationship between a TX associated with the transaction manager and at least one resource that participates in the transaction, the resource capable of storing data in a durable state; and
> a kernel enlistment object (EN) to represent a relationship between a resource manager and the transaction,
> wherein two-phase commit processing is executed at the kernel-level by calling application program interfaces (APIs) on the TX, the RMO, and the EN, the APIs local with the transaction manager, the transaction manager located in a kernel of an operating system.

Applicant respectfully submits that Schaefer fails to disclose or suggest the recitations of claim 40. Specifically, Schaefer fails to disclose or suggest "wherein two-phase commit processing is *executed at the kernel-level* by calling application program interfaces (APIs) on the TX, the RMO, and the EN, *the APIs local with the transaction manager, the transaction manager local in a kernel of an operating system*" as recited in claim 40. (Emphasis added).

A thorough search of Shaefer fails to uncover any mention of the term Kernel or any related variation of Kernel and thus Schaefer fails to disclose "wherein two-phase commit processing is executed *at the kernel-level*." (Emphasis added). Second, the APIs of Schaefer reside on a remote server rather than "local with the transaction manager, the transaction manager *located in a kernel of an operating system*" as recited in claim 40. (Emphasis added). Thus, Shaefer fails to disclose "wherein two-phase commit processing is executed at the kernel-level by calling application program interfaces (APIs) on the TX, the RMO, and the EN, the APIs local with the transaction manager, the transaction manager local in a kernel of an operating system" as recited in claim 40.

Accordingly, Applicant respectfully submits that claim 40 is distinguishable over Schaefer for at least the foregoing reasons, and thus requests that the rejection be reconsidered and withdrawn.

§ 103 REJECTIONS

Dependent claims 4, 16, 17, 20, and 26 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,157,927 ("Schaefer") in view of U.S. Patent No. 6,728,958 ("Klein"). Applicant respectfully traverses the rejection, and requests that the rejection be reconsidered and withdrawn.

Dependent claims 4, 16, 17, 20, and 26 depend from independent claim 1 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Dependent claims 13 and 19 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,157,927 ("Schaefer") in view of U.S. Patent No. 6,101,527 ("Lejeune"). Applicant respectfully traverses the rejection, and requests that the rejection be reconsidered and withdrawn.

Dependent claims 13 and 19 depend from independent claim 1 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

CONCLUSION

For at least the foregoing reasons, it is respectfully submitted that claims 1-13, 15-23, 25-29, 31-38 and 40 are now in condition for allowance. Applicant respectfully requests reconsideration and withdrawal of the rejections and an early notice of allowance.

The arguments and amendments presented herein were necessitated by the most recent Office Action, and could not have been presented previously because Applicant earnestly believed that the claims were in condition for allowance at the time of filing the previous response.

If any issue remains unresolved that would prevent allowance of this case, Applicant requests that the Examiner contact the undersigned attorney to resolve the issue.

Respectfully Submitted,

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Dated: 2008-10-17 By: _____

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